

HIGH VELOCITY IMPLOSIONS ON PBFA Z

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Implosions with velocities $\sim 2 \times 10^8$ cm/sec are being designed for the PBFAZ accelerator at Sandia. Large initial diameter (~ 10 cm), uniform and distributed fill xenon gas puff loads are used. Snowplow, finite gyro radius, and ion-ion viscosity effects significantly reduce the total growth of the magneto-Rayleigh-Taylor instability. Initial rad-hydro non-LTE calculations show that many tens of kilojoules of xenon-L-shell and a few to ten kilojoules of K-shell (~ 30 keV) radiation should be produced.

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